AMENDMENT UNDER 37 C.F.R. §1.111
US Application No. 10/032,098
Attorney Docket No. Q67557

IN THE CLAIMS.

1. (currently amended) An electrical circuit inspection apparatus comprising:

a first inspection functionality operative to obtain first attribute information with respect to a conductor location on an electrical circuit;

a second inspection functionality operative to obtain second attribute information with respect to said conductor location on said electrical circuit; and

a conductor ~~attribute~~ defect analyzer receiving said first attribute information and said second attribute information, and evaluating a combination of said first attribute information and said second attribute information to determine ~~an inspection attribute of~~ the presence of a conductor defect at said conductor location, said conductor defect being indicated in said first attribute information, and further indicated in said second attribute information.

2. (original) The electrical circuit inspection apparatus according to claim 1, wherein said first inspection functionality senses reflectivity at said conductor location as a basis for said first attribute information.

3. (original) The electrical circuit inspection apparatus according to claim 2, wherein said first inspection functionality determines a top width dimension of said conductor based on said sensed reflectivity.

4. (original) The electrical circuit inspection apparatus according to claim 1, wherein said second inspection functionality senses luminescence at said conductor location as a basis for said second attribute information.

5. (original) The electrical circuit inspection apparatus according to claim 4, wherein said second inspection functionality determines a bottom width dimension of said conductor based on said sensed luminescence.

6. (original) The electrical circuit inspection apparatus according to claim 3, wherein said second inspection functionality senses luminescence at said conductor location as a basis for said second attribute information.

7. (original) The electrical circuit inspection apparatus according to claim 6, wherein said second inspection functionality determines a bottom width dimension of said conductor based on said sensed luminescence.

8. (original) The electrical circuit inspection apparatus according to claim 7, wherein said inspection attribute is a cross section configuration of said conductor.

9. (original) The electrical circuit inspection apparatus according claim 7, wherein said attribute analyzer comprises an impedance analyzer receiving said top width dimension and said bottom width dimension for a plurality of conductor locations, and determining therefrom an impedance attribute of said conductor.

10. (currently amended) An electrical circuit inspection method comprising:

obtaining first attribute information ~~of~~ for a plurality of conductor locations on an electrical circuit;

obtaining second attribute information of said plurality of locations; and

determining ~~an inspection attribute of~~ a conductor defect at one or more of said conductor locations based on a combination of said first attribute information and said second

attribute information, said conductor defect being indicated in said first attribute information and further indicated in said second attribute information.

11. (currently amended) The electrical circuit inspection method according to claim 10, wherein said ~~providing of~~obtaining said first attribute information comprises sensing a reflectivity value.

12. (currently amended) The electrical circuit inspection method according to claim 11, wherein said ~~providing of~~obtaining said first attribute information further comprises: receiving said reflectivity value, for said one or more conductor locations; and determining therefrom a top width dimension of said conductor.

13. (currently amended) The electrical circuit inspection method according to claim 10, wherein said ~~providing of~~obtaining said second attribute information comprises sensing a luminescence value.

14. (currently amended) The electrical circuit inspection method according to claim 13, wherein said ~~providing of~~obtaining said second attribute information further comprises: receiving said luminescence value for said one or more conductor locations; and determining therefrom a bottom width dimension of said conductor.

15. (currently amended) The electrical circuit inspection method according to claim 10, and wherein said ~~providing of~~obtaining said second attribute information comprises sensing a height value.

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16. (currently amended) The electrical circuit inspection method according to claim 15, wherein said ~~providing of~~obtaining said second attribute information further comprises sensing ~~set~~ said height value based on a topographical profile.

17. (currently amended) The electrical circuit inspection method according to claim 12, wherein said ~~providing of~~obtaining said second attribute information comprises sensing a luminescence value.

18. (currently amended) The electrical circuit inspection method according to claim 15, wherein said ~~providing of~~ obtaining said second attribute information further comprises: receiving said luminescence value for said one or more conductor locations; and determining therefrom a bottom width dimension of said conductor.

19. (original) The electrical circuit inspection method according to claim 16, further comprising determining, as said inspection attribute, a cross section configuration of said conductor based on said top width dimension and said bottom width dimension.

20. (original) The electrical circuit inspection method according claim 16, further comprising determining, as said inspection attribute, an impedance attribute of said conductor, based on said top width dimension and said bottom width dimension for said one or more conductor locations.

21. (original) The electrical circuit inspection method according claim 10, further comprising employing said inspection attribute to determine a defect in a process used to fabricate said electrical circuit.

22. (original) The electrical circuit inspection method according to claim 10, further comprising making a production determination based on said inspection attribute.

23. (original) The electrical circuit inspection method according to claim 22, wherein said production determination is one of: approving said electrical circuit; discarding said electrical circuit; and repairing said electrical circuit.

Claims 24 - 33. (Canceled)